



UNITED STATES PATENT AND TRADEMARK OFFICE

6A
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,922	02/14/2002	Gregory Poilasne	005111.P012	3647

30542 7590 09/11/2003

FOLEY & LARDNER
P.O. BOX 80278
SAN DIEGO, CA 92138-0278

[REDACTED] EXAMINER

LE, HOANGANH T

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 09/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/076,922	Applicant(s) POILASNE et al
	Examiner HOANGANH LE	Art Unit 2821
		
<i>-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --</i>		
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.		
<p>- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</p> <ul style="list-style-type: none"> - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). 		
Status		
1) <input checked="" type="checkbox"/> Responsive to communication(s) filed on <u>Jul 18, 2003</u>		
2a) <input checked="" type="checkbox"/> This action is FINAL . 2b) <input type="checkbox"/> This action is non-final.		
3) <input type="checkbox"/> Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.		
Disposition of Claims		
4) <input checked="" type="checkbox"/> Claim(s) <u>1-11, 13, 14, and 16-32</u> is/are pending in the application.		
4a) Of the above, claim(s) _____ is/are withdrawn from consideration.		
5) <input type="checkbox"/> Claim(s) _____ is/are allowed.		
6) <input checked="" type="checkbox"/> Claim(s) <u>1-11, 13, 14, and 16-32</u> is/are rejected.		
7) <input type="checkbox"/> Claim(s) _____ is/are objected to.		
8) <input type="checkbox"/> Claims _____ are subject to restriction and/or election requirement.		
Application Papers		
9) <input type="checkbox"/> The specification is objected to by the Examiner.		
10) <input type="checkbox"/> The drawing(s) filed on _____ is/are a) <input type="checkbox"/> accepted or b) <input type="checkbox"/> objected to by the Examiner. <p style="margin-left: 20px;">Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).</p>		
11) <input type="checkbox"/> The proposed drawing correction filed on _____ is: a) <input type="checkbox"/> approved b) <input type="checkbox"/> disapproved by the Examiner. <p style="margin-left: 20px;">If approved, corrected drawings are required in reply to this Office action.</p>		
12) <input type="checkbox"/> The oath or declaration is objected to by the Examiner.		
Priority under 35 U.S.C. §§ 119 and 120		
13) <input type="checkbox"/> Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).		
a) <input type="checkbox"/> All b) <input type="checkbox"/> Some* c) <input type="checkbox"/> None of: 1. <input type="checkbox"/> Certified copies of the priority documents have been received. 2. <input type="checkbox"/> Certified copies of the priority documents have been received in Application No. _____ 3. <input type="checkbox"/> Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). <p style="margin-left: 20px;">*See the attached detailed Office action for a list of the certified copies not received.</p>		
14) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e). a) <input type="checkbox"/> The translation of the foreign language provisional application has been received.		
15) <input type="checkbox"/> Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.		
Attachment(s)		
1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)		
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)		
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____		
4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____		
5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)		
6) <input type="checkbox"/> Other: _____		

DETAILED ACTION

1. The amendment filed on July 18, 2003 is acknowledged.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, "the parasitic antenna element is disposed between the plane of the "U"- shaped conductor and the ground plane" of claim 30 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 26-31 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to

reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claim 26, the limitation "a capacitive portion of the antenna located in a plane defined by the first and second legs, an inductive portion of the antenna located between the ground plane and the first and second legs" finds no support in the specification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-11, and 16-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Ko et al (the US Patent No. 5,781,158, cited by Applicant).

The Ko et al reference teaches in figure 6 an antenna comprising: a ground plane 11a; a first conductor 15a having a first length extending longitudinally above the ground plane and having a first end electrically connected to the ground plane 11a at a first location; a second conductor 15b having a second length extending longitudinally above the ground plane and parallel to the first conductor, the second conductor having a first

end electrically connected to the ground plane at a second location; an antenna feed 16 coupled to the first conductor 15a; wherein the first and second conductors are equidistant from the ground plane (figure 6). The first and second conductors are both disposed on a single substrate 14a. The single substrate comprises a flexible printed circuit substrate. The first length is approximately equal to the second length (figures 9,14,19 and 23). The first location is spaced apart from the second location by a distance approximately equal to the first length. The first and second conductors 13d comprise a first antenna element and further comprising a second antenna element having a third conductor 15g and a fourth conductor 15g (figure 14). The second antenna element is a parasitic element. The first and second antenna elements are parallel to each other (figure 14). The first and second antenna elements are non-parallel to each other (figure 19). The third and fourth conductors 15i are equidistant from the ground plane at a distance equal to a distance between the first and second conductors 15j and the ground plane (figure 19). The third and fourth conductors are equidistant from the ground plane at a distance different from a distance between the first and second conductors and the ground plane (figure 14). An electronic device has a housing and wherein the ground plane is adjacent to a first surface of the housing and the first and second conductors are adjacent to a second surface of the housing (col. 1, lines 17-18).

The limitation "a current distribution having a substantially circular cross-section"

is merely intended use which fails to patentably distinguish the claims.

7. Claims 26-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanad (the US Patent No. 5,627,550, cited by Applicant).

The Sanad reference teaches in figure 14 an antenna comprising: a ground plane 88; a generally "U"- shaped conductor 84 having first and second parallel legs lying in a plane spaced apart from the ground plane 88; an antenna feed 34 coupled to a first end of the first leg; a short 84b between the ground plane and at least one of the first and second legs. The short extends from the ground plane to the first end of the first leg (figure 14).

Figure 14 shows a parasitic antenna element 86 in proximity to the "U"- shaped conductor 84. The parasitic antenna element 86 is disposed to a side of the "U" shaped conductor. The parasitic antenna element is disposed between the plane of the "U"- shaped conductor and the ground plane. The parasitic antenna element comprises a first conductor 82 having a first length extending longitudinally above the ground plane 88 and having a first end 82b electrically connected to the ground plane 88, a second conductor 86 having a second length extending longitudinally above the ground plane and parallel to the first conductor 82, the second conductor 86 having a first end 86b electrically connected to the ground plane 88, wherein the first and second conductors are equidistant from the ground plane (figure 14).

The limitation "a current distribution having a substantially circular cross-section"

is merely intended use which fails to patentably distinguish the claims

8. Claim 32 is rejected under 35 U.S.C. 102(b) as being anticipated by Fukasawa et al (the US Patent No. 5,966,097).

The Fukasawa et al reference teaches in figure 1 an antenna comprising: a ground plane 1; a first conductor 2 having a first length extending longitudinally above the ground plane and having a first end and a second end, the first end electrically connected to the ground plane 1 at a first location 2a; a second conductor 13 having a second length extending longitudinally above the ground plane and parallel to the first conductor, the second conductor having a first end and a second end, the first end positioned opposite the first end of the first conductor and electrically connected to the ground plane at a second location 3a, the second end of the second conductor extended longitudinally beyond the second end of the first conductor; an antenna feed 2b coupled to the first conductor 2; wherein the first and second conductors are equidistant from the ground plane (figure 1).

The limitation “a current distribution having a substantially circular cross-section” is merely intended use which fails to patentably distinguish the claims

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al (cited above) in view of Smith et al (the US Patent No. 6,304,222).

The Ko et al reference teaches every feature of the claimed invention, excluding the first and second conductors being arched above the ground plane.

The Smith et al reference teaches in figure 4b conductors 2,3 being arched above the ground plane 4 in order to improve the efficiency of the antenna (col. 5, lines 55-60).

Since one of ordinary skill in the art would recognize the benefit of improving the efficiency of the antenna, it would have been obvious to provide Ko et al with the conductors being arched as taught by Smith et al.

11. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al (cited above) in view of Lahti (the US Patent No. 6,348,894).

The Ko et al reference teaches every feature of the claimed invention, excluding spring contacts.

The Lahti reference teaches in col. 3, lines 43-45 the use of spring contacts to provide electrical contact between the antenna and the ground.

Since one of ordinary skill in the art would recognize the benefit of improving the electrical contact of the antenna, it would have been obvious to provide Ko et al with spring contacts as taught by Lahti.

Response to Arguments

12. Applicant's arguments filed July 18, 2003 have been fully considered but they are not persuasive.

In response to applicant's argument that Ko et al and Sanad do not teach a current distribution having a substantially circular cross-section, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the two conductors overlap creating a substantially circular current distribution) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Since all claimed structure is shown, the 102 rejections are proper.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

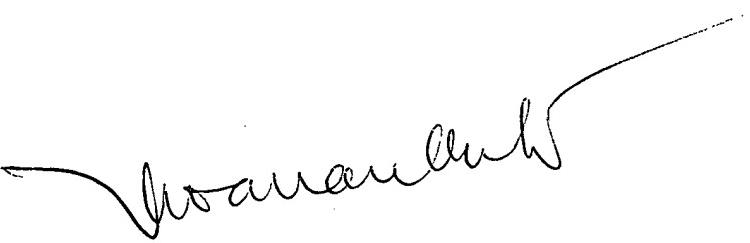
Correspondence

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Hoanganh Le whose telephone number is (703) 308-4921.

15. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center receptionist whose telephone number is (703) 308-0956.

16. Papers related to Technology Center 2800 applications **only** may be submitted to Technology Center 2800 by facsimile transmission. Any transmission not to be considered an official response must be clearly marked "DRAFT". The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center Fax Center number is (703) 308-7722 or (703) 308-7724.

Hoanganh Le
Primary Examiner
Art Unit 2821
September 3, 2003


Hoanganh Le
Primary Examiner